

**UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF OHIO
EASTERN DIVISION**

ROYAL APPLIANCE ,
MANUFACTURING CO., *et al.*,

Plaintiffs,

v.

FELLOWES, INC.,

Defendant.

CASE NO. 1: 10 CV 2604

JUDGE DONALD C. NUGENT

MEMORANDUM OPINION
AND ORDER

This matter comes before the Court upon the Report and Recommendation of Magistrate Judge Nancy A. Vecchiarelli. The Report and Recommendation (Document # 61), issued on October 2, 2012, is ADOPTED by this Court with the modifications set forth below. Plaintiffs filed this action seeking declaratory relief that their products do not infringe United States Patent Nos. 7,963,468 (“the ‘468 Patent”), and 8,020,796 (“the ‘796 Patent”), both of which are held by Fellowes, Inc. (“Fellowes”). Magistrate Judge Vecchiarelli held a claim construction hearing and issued the following recommendation regarding the construction of the disputed terms.

1. **Disputed term 1:** said thickness detector is provided in the form of an elongate arm (claims 1, 5); **recommended construction:** said thickness detector is provided in the form of an arm extending from the feed

aperture to a switch or a device for detecting movement of the arm (pp. 16-17).

2. **Disputed term 2:** an elongate arm mounted for pivotal movement (claims 1, 5); **recommended construction:** an elongated arm attached in a manner to allow rotation around a fixed point (pp. 17-18).
3. **Disputed term 3:** the thickness detector permits energization of the cutting mechanism (claims 1, 5, 9, 13, 14); **recommended construction:** the thickness detector permits the flow of electricity to the cutting mechanism (p. 24).
4. **Disputed term 4:** the thickness detector prevents energization of the cutting mechanism (claims 1, 5, 9, 13, 14); **recommended construction:** the thickness detector prevents the flow of electricity to the cutting mechanism (p. 24).
5. **Disputed term 5:** the controller is configured to prevent the starting of energization of the cutting mechanism (claims 9, 11); **recommended construction:** the controller is configured to prevent the flow of electricity to the cutting mechanism (pp. 24-25).
6. **Disputed terms 6:** “the controller is configured to start energization of the cutting mechanism” and “said controller being configured to . . . permit energization of the cutting mechanism” (claims 9, 11); **recommended constructions:** “the controller is configured to send electricity to the cutting mechanism” and “the controller is configured to permit the flow of

electricity to the cutting mechanism” (p. 25).

7. **Disputed term 7:** movement of said part in the feed-aperture amplifies movement of the detectable element at the sensor (claims 10, 12, 13, 14); **recommended construction:** movement of the portion of the thickness detector in the feed-aperture results in increased movement of the detectable element at the sensor (pp. 18-19).
8. **Disputed term 8:** pivot axis (claims 2, 3, 4, 6, 7, 8); **recommended construction:** no construction necessary or, alternatively, “fixed point around which rotation occurs” (pp. 19).
9. **Disputed term 9:** substantially adjacent to the feed-aperture (claims 3, 7); **recommended construction:** close to, next to, or beside the feed aperture, but not in the feed-aperture (pp. 19-20).
10. **Disputed term 10:** feed-aperture (claims 1, 2, 3, 5, 6, 7, 9, 10, 11, 12, 13); **recommended construction:** the throat, namely the entire space through which materials being shredded are fed into the cutter elements [by agreement of the parties].
11. **Disputed term 11:** wherein part of the thickness detector extends into the feed-aperture (claims 1, 5, 9, 13; also claim 11 states “the thickness detector having a part extending into the feed-aperture”); **recommended construction:** no construction necessary (p. 18).
12. **Disputed term 12:** in response to (claims 9, 11); **recommended construction:** no construction necessary or, alternatively, “as a result

of” (pp. 25-26).

13. **Disputed term 13:** being configured to cause a break in the circuit (claims 2, 6); **recommended construction:** no construction necessary (p. 26).

Recommended constructions in construing the disputed terms in the ‘796 patent:

1. **Disputed term 1:** [the controller being configured to determine whether the thickness detector detects that the thickness of the at least one article to be shredded being received by the throat is] below or at or above [a predetermined maximum thickness threshold], and [determining whether the thickness detector detects that the thickness of the at least one article to be shredded being received by the throat is] below or at or above [a predetermined maximum thickness threshold] (claims 1, 21); **recommended construction:** either (1) less than or, alternatively, (2) greater than or equal to (claims 1, 21) (pp. 27-30).
2. **Disputed term 2:** detects (claims 1,21); **recommended construction:** no construction necessary (pp. 31-36).
3. **Disputed term 3:** without preventing the operation of the motor in the shredding direction in response to the thickness detector detecting during the operation of the motor that the thickness of the at least one article is at or above the predetermined maximum thickness threshold to thereby prevent unnecessary motor shut-off due to flutter of the at least one article being shredded (claims 1, 21); **recommended construction:** without

stopping or interrupting the operation of the motor in the shredding direction in response to the thickness detector detecting during the operation of the motor that the thickness of the at least one article is at or above the predetermined maximum thickness threshold to thereby prevent unnecessary motor shut-off due to flutter of the at least one article being shredded (pp. 36-38).

4. **Disputed term 4:** predetermined maximum thickness threshold (claims 1, 21); **recommended construction:** no construction necessary (pp. 38-39).
5. **Disputed term 5:** fluttering (claims 1, 21); **recommended construction:** waving, bending, flapping, or other similar movement (pp. 39-40).
6. **Disputed term 6:** motor operating condition (claims 18, 31); **recommended construction:** status of the motor's operation, for example, the temperature of the motor, the current flowing through the motor, or the like (pp. 40-41).

The Parties filed objections to the Report and Recommendation (ECF # 63, 64), and this Court permitted them to also file Responses to the opposition's Objections. (ECF #67, 68). Plaintiffs filed an Objection to Magistrate Vecchiarelli's construction of Term 3 in Patent '796. Fellowes objected to the recommended construction of Terms 1, and 3 through 6 of the '468 Patent. The Court has reviewed *de novo* the Report and Recommendation, *see Ohio Citizen Action v. City of Seven Hills*, 35 F. Supp. 2d 575, 577 (N.D. Ohio 1999), and ADOPTS the Report and Recommendation with the noted minor modifications.

CONSTRUCTION OF '796 PATENT: TERM 3 (CLAIMS 1 AND 21).

With regard to Term 3 of the '796 Patent, Plaintiffs ask that the Court modify the construction recommended by the Magistrate and adopt their construction of this term. Patent '796 addresses an improvement to prior anti-jamming technology contained in shredders that are described by the '468 Patent. The Report and Recommendation accurately sets forth both the language of the patent claim and the other relevant information, including the patent specifications and product descriptions. The dispute centers around the following terminology contained in Claims 1 and 21 of the '796 Patent: “without preventing the operation of the motor in the shredding direction in response to the thickness detector detecting during the operation of the motor that the thickness of the at least one article is at or above the predetermined maximum thickness threshold to thereby prevent unnecessary motor shut-off due to flutter of the at least one article.” Plaintiffs believe that this language should be construed to mean “without stopping the motor when it is determined that fluttering has caused the thickness detector to detect at least one article is at or above the predetermined maximum thickness threshold.”

Magistrate Vecchiarelli found based on the arguments of the parties, the evidence presented at the claim construction hearing, and a very thorough review of the Patent itself, that this interpretation includes a limitation that conflicts with the clear language of the patent, and is not supported by the other evidence. The patent language contains no requirement that the shredder “determine that fluttering has caused” the thickness detector to register that the items being shredded exceed the maximum thickness threshold. Rather, it merely instructs that the invention will not prevent operation of the shredding mechanism if the maximum thickness threshold is not exceeded at the beginning of the shredding process, even if that threshold may

be exceeded during the shredding process. This is meant to avoid unnecessary motor shut-off due to “fluttering” (i.e. the bending, waving, flapping, or other movement of the article being shredded), which may temporarily and falsely indicate an increase the thickness of the articles entering the shredding mechanism. The patent language, as supported by the prosecution history and the totality of the information contained in the specifications, does not limit the invention to one which prevents shut-off only after the machine “determines” by some sensor or other predetermined setting or measure, that the sensed increase in thickness is actually caused by fluttering. Rather, although the invention is aimed at preventing unnecessary shut-off due to fluttering, it includes a less precise, or over inclusive method of preventing an unnecessary shut-off, which would result in a continuation of shredding even if the perceived increase in thickness during the shredding process had some other cause. Although both parties seem to agree that the patent reaches inventions that include a more precise indication that increased thickness is caused by fluttering (for example via a pre-programmed flutter thickness setting), neither asked that the term be constructed to specify this as an alternative means of determining when the motor will be triggered to shut-off. Plaintiffs sought to limit, rather than expand the language of the patent term to exclude inventions that do not have a pre-programmed flutter thickness setting or other means of determining the cause of any perceived increase in the thickness of an article being shredded. The patent language and other relevant information simply do not support such a limitation. Magistrate Vecchiarelli’s construction of the term is, therefore, accurate and the reasoning she provides for her construction is well supported and well reasoned.

CONSTRUCTION OF ‘486 PATENT, TERMS 1 AND 3-6 (CLAIMS 1,5,9, 11, 13, 14)

Defendant Fellowes objects to the recommended construction of Term 1, and Terms 3-6 of the '486 Patent. With regard to Term 1, Fellowes argues not over the description of the arm's shape, although both parties suggested descriptive terms which differed from the shapes disclosed in the drawings. Rather, Fellowes seeks to change the term from "the thickness detector is provided in the form of an elongate arm," to "the thickness detector includes a slender arm." Magistrate Vecchiarelli addressed the "includes" vs. "in the form of" distinction thoroughly and persuasively, albeit in a footnote (ECF #61,fn. 1, pg. 16). The patent uses the "in the form of" language, and although some preferred embodiments show additional components, not all do. Therefore, the Report and Recommendation is correct to conclude that additional components are not integral or necessary parts of the thickness detector. Any further argument as to whether the inclusion of such components sufficiently vary from the patent to avoid infringement is an issue that can be addressed to the jury. The construction suggested in the Report and Recommendation is adopted as written.

The parties agree that terms 3-6 of the '486 Patent are intertwined and should be construed consistently. The Report and Recommendation, based on the patent language and other evidence presented at the hearing, explains that the shredder described in the '468 Patent "includes a thickness detector as an aid to avoid jamming. In various configurations, the detector may interact with the shredder's motor, a controller, a sensor, and light or sound displays to warn of or stop possible jams." It also goes on to say that the "thickness detector, and sometimes a sensor, send signals to a controller. If the thickness detector signals that predetermined thickness levels are not being exceeded and if the sensor, if any, signals that one or more items are in the feed aperture, the controller 'starts energization' of the shredder

mechanism. However, both the thickness detector and the sensor, if any, have a veto over the operation of the shredder mechanism. If either device signals that conditions do not support operation . . . then the shredder mechanism is prevented from operating because ‘the controller is configured to prevent the starting of energization of the cutting mechanism.’”

Fellowes argues that the construction of the “permits/prevents” language in terms three through six includes an invention where the thickness detector either “directly or indirectly” permits/prevents energization of the shredding mechanism because the patent describes a product wherein the detector signals the controller to shut off the motor driving the shredding mechanism if the maximum thickness threshold is exceeded. Fellowes also argues that Term 13 should be considered and constructed in a manner that is consistent with the direct/indirect explanation. Plaintiffs, on the other hand, seek to argue that any invention in which the controller, rather than the thickness detector, prevents or permits energization, does not violate the ‘468 Patent.

The patent language, and the Magistrate’s summary of all of the evidence and information before it indicates that this patent includes products in which the thickness detector “signals” the controller to cut power to the shredding mechanism, as well as products in which the thickness detector itself moves to interrupt the circuit or impede the flow of electricity to the shredding mechanism. Therefore, Fellowes’ objections have some merit. The addition of “direct or indirect” into the language, however, may be a bit too broad considering the other language and limitations contained in the patent. Further, the terms five and six, relating to the controller’s influence on the energization of the shredding mechanism are not necessarily affected by the reasoning supporting the Defendant’s objections. Therefore the terms are to be

constructed as follows:

3. **Disputed term 3:** the thickness detector permits energization of the cutting mechanism (claims 1, 5, 9, 13, 14); **recommended construction:** the thickness detector neither interrupts nor signals the controller to interrupt the flow of electricity to the cutting mechanism (p. 24).
4. **Disputed term 4:** the thickness detector prevents energization of the cutting mechanism (claims 1, 5, 9, 13, 14); **recommended construction:** the thickness detector interrupts or signals the controller to interrupt the flow of electricity to the cutting mechanism (p. 24).
5. **Disputed term 5:** the controller is configured to prevent the starting of energization of the cutting mechanism (claims 9, 11); **recommended construction:** the controller is configured to prevent the flow of electricity to the cutting mechanism (pp. 24-25).
6. **Disputed terms 6:** “the controller is configured to start energization of the cutting mechanism” and “said controller being configured to . . . permit energization of the cutting mechanism” (claims 9, 11); **recommended constructions:** “the controller is configured to send electricity to the cutting mechanism” and “the controller is configured to permit the flow of electricity to the cutting mechanism” (p. 25).

In addition to the objections raised by the parties, Magistrate Vecchiarelli’s Report and Recommendation in some instances recommended either a possible construction, or a finding of “no construction necessary” for some of the disputed terms. In such instances, the Court adopts

the “no construction necessary” option.

For the reasons set forth above, the Court adopts the Report and Recommendation with the noted minor modifications, finding that the Report was thorough, well reasoned, and generally correct. The final construction of the disputed terms is as follows:

1. **Disputed term 1:** said thickness detector is provided in the form of an elongate arm (claims 1, 5); **recommended construction:** said thickness detector is provided in the form of an arm extending from the feed aperture to a switch or a device for detecting movement of the arm (pp. 16-17).
2. **Disputed term 2:** an elongate arm mounted for pivotal movement (claims 1, 5); **recommended construction:** an elongated arm attached in a manner to allow rotation around a fixed point (pp. 17-18).
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4. **Disputed term 4:** the thickness detector prevents energization of the cutting mechanism (claims 1, 5, 9, 13, 14); **recommended construction:** the thickness detector interrupts or signals the controller to interrupt the flow of electricity to the cutting mechanism (p. 24).
5. **Disputed term 5:** the controller is configured to prevent the starting of energization of the cutting mechanism (claims 9, 11); **recommended**

construction: the controller is configured to prevent the flow of electricity to the cutting mechanism (pp. 24-25).

6. **Disputed terms 6:** “the controller is configured to start energization of the cutting mechanism” and “said controller being configured to . . . permit energization of the cutting mechanism” (claims 9, 11); **recommended constructions:** “the controller is configured to send electricity to the cutting mechanism” and “the controller is configured to permit the flow of electricity to the cutting mechanism” (p. 25).
7. **Disputed term 7:** movement of said part in the feed-aperture amplifies movement of the detectable element at the sensor (claims 10, 12, 13, 14); **recommended construction:** movement of the portion of the thickness detector in the feed-aperture results in increased movement of the detectable element at the sensor (pp. 18-19).
8. **Disputed term 8:** pivot axis (claims 2, 3, 4, 6, 7, 8); **recommended construction:** no construction necessary (pp. 19).
9. **Disputed term 9:** substantially adjacent to the feed-aperture (claims 3, 7); **recommended construction:** close to, next to, or beside the feed aperture, but not in the feed-aperture (pp. 19-20).
10. **Disputed term 10:** feed-aperture (claims 1, 2, 3, 5, 6, 7, 9, 10, 11, 12, 13); **recommended construction:** the throat, namely the entire space through which materials being shredded are fed into the cutter elements [by agreement of the parties].

11. **Disputed term 11:** wherein part of the thickness detector extends into the feed-aperture (claims 1, 5, 9, 13; also claim 11 states “the thickness detector having a part extending into the feed-aperture”); **recommended construction:** no construction necessary (p. 18).
12. **Disputed term 12:** in response to (claims 9, 11); **recommended construction:** no construction necessary (pp. 25-26).
13. **Disputed term 13:** being configured to cause a break in the circuit (claims 2, 6); **recommended construction:** no construction necessary (p. 26).

Recommended constructions in construing the disputed terms in the ‘796 patent:

1. **Disputed term 1:** [the controller being configured to determine whether the thickness detector detects that the thickness of the at least one article to be shredded being received by the throat is] below or at or above [a predetermined maximum thickness threshold], and [determining whether the thickness detector detects that the thickness of the at least one article to be shredded being received by the throat is] below or at or above [a predetermined maximum thickness threshold] (claims 1, 21); **recommended construction:** either (1) less than or, alternatively, (2) greater than or equal to (claims 1, 21) (pp. 27-30).
2. **Disputed term 2:** detects (claims 1,21); **recommended construction:** no construction necessary (pp. 31-36).
3. **Disputed term 3:** without preventing the operation of the motor in the shredding direction in response to the thickness detector detecting during the operation of

the motor that the thickness of the at least one article is at or above the predetermined maximum thickness threshold to thereby prevent unnecessary motor shut-off due to flutter of the at least one article being shredded (claims 1, 21); **recommended construction:** without stopping or interrupting the operation of the motor in the shredding direction in response to the thickness detector detecting during the operation of the motor that the thickness of the at least one article is at or above the predetermined maximum thickness threshold to thereby prevent unnecessary motor shut-off due to flutter of the at least one article being shredded (pp. 36-38).

4. **Disputed term 4:** predetermined maximum thickness threshold (claims 1, 21); **recommended construction:** no construction necessary (pp. 38- 39).
5. **Disputed term 5:** fluttering (claims 1, 21); **recommended construction:** waving, bending, flapping, or other similar movement (pp. 39-40).
6. **Disputed term 6:** motor operating condition (claims 18, 31); **recommended construction:** status of the motor's operation, for example, the temperature of the motor, the current flowing through the motor, or the like (pp. 40-41).

A status conference is set for January 14, 2012 at 10:00 a.m. IT IS SO ORDERED.

/s/ Donald C. Nugent
DONALD C. NUGENT
United States District Judge

DATED: November 19, 2012